Drug Test Results

Testing for the presence of AOD metabolites in saliva and urine samples provides objective, although not infallible data. When interpreting test results, it should be noted that various factors can affect the presence of drug metabolites: dosage level, sensitivity of the testing procedures, rates at which individuals metabolize alcohol and other drugs, and biochemical properties of different drugs. For example, the human body metabolizes alcohol and excretes its by-products within hours. On the other hand, some marijuana metabolites may sequester in fat tissue and be excreted for up to a month. Analysis of data presented in *Ellenhorn's Medical Toxicology* suggests that, excluding "ongoing abuse of marijuana," the mean window of detectability at cut-off concentrations for common drugs of abuse is approximately 4.1 days (S.D.=2.43).[18] The patterns of recent AOD use revealed through the saliva testing and urinalysis, then, should be examined in light of these caveats.

The highest prevalence of positive test results among the ER sample occurred for marijuana, followed by tranquilizers, opioids (including heroin), stimulants and alcohol, respectively (Table 15 and Figure 17). Sixteen percent of the ER sample tested positive for use of alcohol and/or illegal drugs (Schedule I controlled substances, as defined under Title 21, United States Code, Section 812, 1996).[21] The age-group least likely to have tested positive for these drugs was older patients, especially those aged 65 years and older. Only 2% in this age-group tested positive. Overall, ER patients were three times more likely to test positive for illegal drugs alone (12%) than for alcohol alone. Patients testing positive for the combined presence of alcohol and the illegal drugs were rare (1%). Test positives for illegal drugs tended to cluster at the younger ages, and for sedatives and stimulants at the older ages. There was less age variation with other drug types, including alcohol.

Table 16 suggests that males were more likely than females to test positive for alcohol and/or illegal drug use (22% versus 12%) and blacks than whites (19% versus 15%). Males manifested an excess prevalence of positive results for alcohol, marijuana and cocaine, and females for stimulants. Blacks manifested an excess prevalence of positive tests for marijuana and cocaine and whites for tranquilizers. Disaggregation of the data for both sexes by race revealed a particularly high prevalence of positive marijuana test results among black and white males, positive cocaine results among black males, and positive results for tranquilizers among white females (Table 17 and Figure 18). Although the data were not tabulated, further disaggregation of data for the four race-sex groups by age showed that 45% of white males, aged 18-24 years, and 40% of black males, aged 18-34, tested positive for marijuana. Forty-two percent of black males aged 35-44 tested positive for cocaine, and 19% of white females aged 65 years and older, and black females, aged 25-34, tested positive for stimulants and opioids (including heroin), respectively. Cell sizes were adequate for this analysis as the smallest cell size for these age-sex-race groups was the 39 cases of black females aged 25-34 years.